Abstract

A system and method for congestion avoidance and load balancing for communication networks is provided. When a source host is sending information to a destination host and a need is detected for an alternate route, a masquerading host acts as the source host and sends the information to the destination along the alternate route. The data is sent in a manner that leads the destination to believe that the data came from the source. In this way, the destination will accept the data as valid. General network status data such as delay times, packet delivery failures, bandwidth information, link status, etc., is used to control and manage the masquerading servers, which are arranged in a rim. Message data may be replicated on each host in the rim or may be passed among the host, or may stem from outside the rim.